

Amendments To The Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A self-centering unit for tire removal machines, comprising a plate~~-(2)~~ provided with a series of angularly equidistant radial slots~~-(4)~~, in each of which a clamping jaw is received and slides to grip the edge of a wheel rim, said clamping jaws being directly linked together ~~in such a manner as to be by a centering means so that said centering means moves all of said clamping jaws together always equidistant from the central axis of said plate, at least one said clamping jaw being associated operably connected with an actuator means causing it said centering means to translate each clamping jaw in a radial direction towards or away from the central axis of the plate, characterized in that~~ wherein a positioner device is interposed between said at least one clamping jaw and said actuator means, ~~there is interposed a positioner device the positioner device being arranged to vary [[the]] a working position of said at least one clamping jaws jaw relative to the actuator means[[,]] without modifying their the travel stroke of remaining clamping jaws.~~

2. (Currently Amended) [[A]] The self-centering unit as claimed in claim 1, ~~characterized in that~~ wherein two said actuator means ~~are~~ respectively associated with two opposing clamping jaws.

3. (Currently Amended) [[A]] The self-centering unit as claimed in ~~claim 1~~ claim 2, ~~characterized by providing~~ further comprising a positioner device for each clamping jaw associated with said actuator means.

4. (Currently Amended) [[A]] The self-centering unit as claimed in claim 1, characterized in that said positioner device comprises a crankshaft provided with a crank, ~~of which the~~ having a crankpin, said crankpin is being received in a ~~bush~~ bushing rigid with said clamping jaw and ~~the outer pivots are~~ crank being connected to said actuator means, and means for locking said crankshaft in different working positions.

5. (Currently Amended) [[A]] The self-centering unit as claimed in claim 4, characterized in that said locking means ~~are associated~~ operably connected with said ~~crankshaft~~ crankpin.

6. (Currently Amended) [[A]] The self-centering
unit as claimed in claim 4, characterized in that said locking
means are ~~associated~~ operably connected with the ~~bush~~ bushing.

7. (Currently Amended) [[A]] The self-centering
unit as claimed in claim 4, characterized in that ~~the lateral~~
~~wall of said bush~~ said bushing is provided with a lateral wall
which presents at least two holes angularly spaced apart.

8. (Currently Amended) [[A]] The self-centering
unit as claimed in claim 4, characterized in that said means
for locking said positioner device in position ~~comprise~~
includes a pin.

9. (Currently Amended) [[A]] The unit as claimed in
claim 8, characterized in that said pin is elastically
maintained inserted in one of the holes present in said ~~bush~~
bushing by the action of a spring.

10. (Currently Amended) [[A]] The unit as claimed
in claim 8, characterized in that said pin is elastically
maintained in a hole present in the crankpin of the crankshaft
by the action of a spring.

11. (Currently Amended) A self-centering unit as
claimed in ~~claim 7~~ claims 5 and 7, characterized in that said
locking means associated with said crankshaft comprise a cup-

shaped body the end of which is provided with a hole, and within which there slides a pin, one end of which is intended to be received in one of the holes of the ~~bush~~ bushing, whereas the opposite end emerges from the cup-shaped body via said hole and is connected to an operating knob, said pin being elastically maintained within one of the at least two holes of the ~~bush~~ bushing by a spring which is mounted about the pin and acts between the end of said cup-shaped body and a shoulder on the pin.

12. (Currently Amended) [[A]] The self-centering unit as claimed in claim 6, characterized in that said locking means associated with the ~~bush~~ bushing comprise a U-shaped latch, the base wall of which presents a rectangular aperture to be received by and to translate on two flat portions of the ~~bush~~ bushing, and the arms of which are provided with a pin and a spring, said pin being normally received in a matching hole in the crankpin of the crank by the action of said spring.

13. (Currently Amended) [[A]] The self-centering unit as claimed in claim 1, characterized in that said actuator means for causing the clamping jaws to translate comprise at least one pneumatic cylinder-piston unit.